

## WINTER OUTLOOK

As the winter weather season approached, the National Oceanic and Atmospheric Administration (NOAA) released its winter outlook for 2007-2008 — the months of December, January, and February. Forecasters at NOAA's Climate Prediction Center in Camp Springs, Maryland, are predicting above-average temperatures for most of the country this winter and above-average precipitation for the Pacific Northwest, the Great Lakes, and the Tennessee Valley. Below-normal precipitation is predicted for the southern tier of states.

Strengthening of La Niña conditions in the equatorial Pacific Ocean during October 2007 — as indicated by increased sea surface temperatures — is expected to bring continuing below-average precipitation to the drought-stricken areas in the U.S. Southwest and Southeast.

Summary forecast for the December 2007–February 2008 winter season:

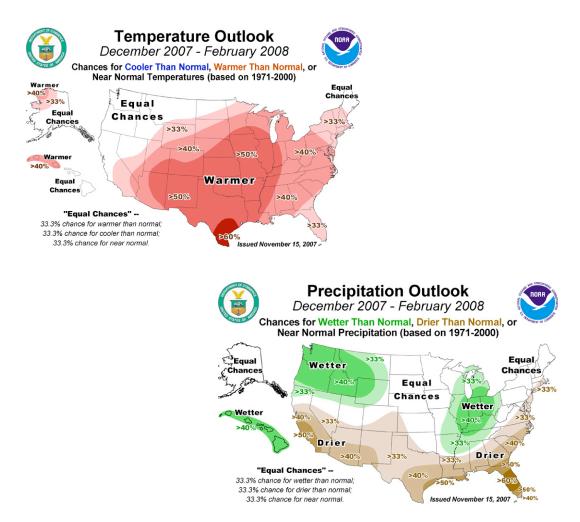
- Mid-Atlantic and Northeast: Above-average temperatures (Mid-Atlantic states and southern parts of the Northeast); drier-than-average conditions along the Mid-Atlantic coast; snowfall dependent on other climate factors.
- Southeast and Southwest: Continuing drought conditions due to La Niña, with lower-than-average precipitation and above-average temperatures.
- Great Lakes and Tennessee Valley: Above-average temperature and precipitation.
- Plains: Warmer and drier than average in the south-central Plains, aboveaverage temperatures and near-average precipitation in the central Plains, equal chances of above-, near-, or below-average temperatures and precipitation in the northern Plains.
- Alaska: Milder than normal in the north; otherwise, equal chances of above, near-, and below-average temperatures and precipitation.
- Hawaii: Above-average precipitation; above-average temperatures in the western islands, with equal chances of above-, near-, and below-average temperatures elsewhere.

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The winter outlook is produced by a team of scientists at the Climate Prediction Center in association with NOAA-funded partners. The forecast is based on long-term climate trends and a variety of forecast tools, from statistical techniques to extremely complex dynamical ocean-atmosphere coupled models.



Graphic representations of the 2007-2008 winter outlook for the United States (courtesy of NOAA Climate Prediction Center).

## HIGH SPEED INTERNET LOOSENS THE BELT AT SGP SITE

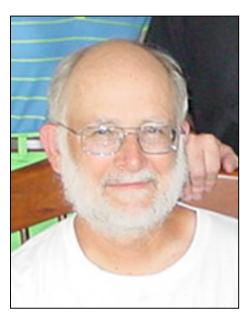
A little more room in the Internet link to the ACRF SGP site is providing needed relief for the crowded lines that keep data flowing from the site. In summer 2007, the Internet service from the SGP Central Facility was switched to a link with higher speed (6 megabits). The switch increased the bandwidth almost 4-fold and provided significant cost savings. In addition, a number of SGP extended facilities, boundary facilities, and intermediate facilities have been converted from dial-up connections to digital subscriber lines (DSL), improving both bandwidth and reliability. The upgrades help greatly in moving the approximately 27 gigabytes of data that the SGP site generates each day.

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Established in 1992, the SGP site remains the flagship ACRF site, with the most instruments and the longest data record. Continued increases in data flowing through the SGP Central Facility had begun approaching the critical limits of the existing bandwidth. Recognizing the need for faster data transfer to keep the lines from bogging down, ACRF operations staff pursued new Internet services for this critical component of the site data system. Cost savings were achieved by moving from an off-site T1 connection to a local Internet provider. The physical length of the original T1 service had contributed significantly to its higher cost.

Internet access to and from the SGP site was disrupted for only a few hours as the new routing mechanism propagated through the Internet. This was a small price to pay for the smooth-running infrastructure that will now support a 20-megabit link, if needed, for future instrument enhancements. Operations personnel continue to monitor the availability of network connectivity with greater cost efficiency for the extended and intermediate facilities still on dial-up links.

Jack D. Shannon 1943-2007



Dr. Jack D. Shannon, a key contributor to the establishment of the ACRF SGP site, died on October 31, 2007, after a battle with cancer. Jack made the first ARM contact with many landowners on whose property the ARM extended, boundary, and intermediate facilities were developed. During weeks of travel in 1992 and 1993 through areas of north-central Oklahoma and south-central Kansas, Jack located geographically representative properties and landowners willing to allow use of their property in return for a small, yearly rental payment. Almost all of the land lease agreements that Jack arranged during his expeditions are still in place. Jack always returned to Argonne (near Chicago) with stories of his travels and recommendations for the best place to find a great slice of pie in Kansas or Oklahoma after a long day on the road.

Jack is fondly remembered and sadly missed by his coworkers of many years. His gift for explaining the ARM

Program's vision in lay language led non-specialist landowners to welcome the installation of meteorological instruments on their property and established the foundation for good relations with the ACRF SGP site's neighbors.

Jack was a local boy, born in McAlister, Oklahoma, on October 18, 1943, to Jack and Ruby Wehunt Shannon. He attended the University of Oklahoma, earning a BS in mathematics. At OU, Jack was commander of the Air Force ROTC program and a member of Phi Beta Kappa and the Lambda Chi Alpha fraternity. After service in Vietnam with the Air Force, Jack returned to OU and received master's and doctoral degrees in meteorology before his career at Argonne began in 1977.

Jack is survived by his brother Thomas A. and wife Judianne of Cardiff by the Sea, California, and their daughters Allison Moore (husband Richard), Michaela Krams (husband Curtis), and Brittany Shannon; by his brother Kelly and wife Manuela of San Antonio, Texas, and their daughter Alexandria Mendoza; and by eight grandnieces and grandnephews.

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